

SCORE OVER LENGTH SEARCHES

Attached is a score over length search. This search was developed to overcome limitations in most standard search systems which favor large sequences with high scoring, but lesser overall identity over smaller sequences with higher overall identity. This search is especially useful for relatively small nucleic acid or polypeptide target sequences (antisense, fragments, probes, primers, RNAi, epitopes, haptens, etc.) claimed functionally via a form of hybridization and/or identity language and having defined upper and lower polynucleotide and or polypeptide length limits.

The score over length search is performed by first running the query sequence using examiner-specified identity and polynucleotide or protein length limit parameters, and saving 65,000 hits and 0 alignments from each desired database. The resulting output is reformatted using a Microsoft Word macro and is imported into Excel. The summary table data are then sorted by the ratio of score of each hit sequence divided by its length and the accession numbers for all hits below the examiner's desired score over length parameters are deleted. The remaining accession numbers are used to pull the corresponding sequences from the databases into subdatabases enriched for good hits and the query sequence is re-run against these subdatabases to yield the final results.

The score over length cutoff for this search is 100%, length 12-30 nt.

Examiner Please Note: This cover sheet should be included when submitting results to be scanned.

searches length &
complementarity, need to
confirm hit is w/in 30

Note: There were no hits matching your criteria in EST, Genbank/EMBL, or Issued Patents-NA, so no results from these databases are included in the score over length results.

GenCore version 5.1.8
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM nucleic - nucleic search, using sw model

Run on: May 9, 2006, 12:39:59 ; Search time 0.001 Seconds
(without alignments)
31.232 Million cell updates/sec

Title: US-09-918-187-3_2989-3052
Perfect score: 64
Sequence: 1 caggcagctccctcctgcac.....cactgtctctctttgaaag 64

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 12 seqs, 244 residues

Total number of hits satisfying chosen parameters: 24

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 12 summaries

Database : pubnewdb.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	25	39.1	25	1	US-11-121-849-244253
2	21	32.8	21	1	US-10-923-451-798
3	21	32.8	21	1	US-10-923-451-800
4	21	32.8	21	1	US-10-923-451-802
5	21	32.8	21	1	US-10-923-451-804
6	21	32.8	21	1	US-10-923-451-805
7	19	29.7	19	1	US-10-923-451-167
8	19	29.7	19	1	US-10-923-451-168
9	19	29.7	19	1	US-10-923-451-169
10	19	29.7	19	1	US-10-923-451-457
11	19	29.7	19	1	US-10-923-451-458
12	19	29.7	19	1	US-10-923-451-459

ALIGNMENTS

RESULT 1
US-11-121-849-244253
; Sequence 244253, Application US/11121849
; Publication No. US20050272080A1
; GENERAL INFORMATION:
; APPLICANT: John Palma
; TITLE OF INVENTION: Methods of Genetic Analysis of Formalin Fixed Paraffin Embedded S
; FILE REFERENCE: 3684.1
; CURRENT APPLICATION NUMBER: US/11/121,849
; CURRENT FILING DATE: 2005-05-03
; PRIOR FILING DATE: 2004-05-03
; NUMBER OF SEQ ID NOS: 673904
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 244253

LENGTH: 25
TYPE: DNA
ORGANISM: Homo sapien
US-11-121-849-244253

Query Match 39.1%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 1.1;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 28 GCTCAGGTCACCTGACCACTGCTT 52
Db 1 GCTCAGGTCACCTGACCACTGCTT 25

RESULT 2

US-10-923-451-798
; Sequence 798, Application US/10923451
; Publication No. US20050256068A1
; GENERAL INFORMATION:

; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Thompson, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearoyl-CoA Desaturase
; FILE REFERENCE: 400/210 (MBH02-1030-C)
; CURRENT APPLICATION NUMBER: US/10/923,451
; CURRENT FILING DATE: 2004-08-20
; NUMBER OF SEQ ID NOS: 810
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 798

LENGTH: 21

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic

NAME/KEY: misc feature

LOCATION: (1)..(1)

OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety, inverted abasic,
OTHER INFORMATION: inverted nucleotide or other terminal cap that is optionally pre

NAME/KEY: misc feature

LOCATION: (21)..(21)

OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety, inverted abasic,
OTHER INFORMATION: inverted nucleotide or other terminal cap that is optionally pre

NAME/KEY: misc feature

LOCATION: (20)..(20)

OTHER INFORMATION: Phosphorothioate or Phosphorodithioate 3'-Internucleotide Linkage
FEATURE:
OTHER INFORMATION: RNA

NAME/KEY: misc feature

LOCATION: (1)..(19)

OTHER INFORMATION: RNA

US-10-923-451-798

Query Match 32.8%; Score 21; DB 1; Length 21;
Best Local Similarity 66.7%; Pred. No. 2.8;
Matches 14; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 39 CTGAACCACTGCTTCCTCTTTT 59
Db 1 CUGAACCACTGCTTCCTCTTTT 21

RESULT 3

US-10-923-451-800
; Sequence 800, Application US/10923451
; Publication No. US20050256068A1
; GENERAL INFORMATION:

; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Thompson, James


```
;
; NAME/KEY: misc_feature
; LOCATION: (8)..(8)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (11)..(11)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-Fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (6)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-Fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(10)
; OTHER INFORMATION: 2'-deoxy-2'-Fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-Fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety, inverted abasic,
; OTHER INFORMATION: inverted nucleotide or other terminal cap that is optionally pre
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety, inverted abasic,
; OTHER INFORMATION: inverted nucleotide or other terminal cap that is optionally pre
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(19)
; OTHER INFORMATION: RNA
; OTHER INFORMATION: RNA
US-10-923-451-804
```

```
Query Match 32.8%; Score 21; DB 1; Length 21;
Best Local Similarity 66.7%; Pred. No. 2.8;
Matches 14; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 39 CTGAACCACTGCTTCTCTTTT 59
Db 1 CUGAACCACTGUCUCUCUUTT 21

RESULT 6
US-10-923-451-805
; Sequence 805, Application US/10923451
; Publication No. US20050256068A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Thompson, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearoyl-CoA Desaturase
; FILE REFERENCE: 400/210 (MBHB02-1030-C)
; CURRENT APPLICATION NUMBER: US/10/923,451
; CURRENT FILING DATE: 2004-08-20
; NUMBER OF SEQ ID NOS: 810
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 805
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; NAME/KEY: misc_feature
```

```
;
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-Fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (6)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-Fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(10)
; OTHER INFORMATION: 2'-deoxy-2'-Fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-Fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety, inverted abasic,
; OTHER INFORMATION: inverted nucleotide or other terminal cap that is optionally pre
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety, inverted abasic,
; OTHER INFORMATION: inverted nucleotide or other terminal cap that is optionally pre
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(19)
; OTHER INFORMATION: RNA
; OTHER INFORMATION: RNA
US-10-923-451-805

Query Match 32.8%; Score 21; DB 1; Length 21;
Best Local Similarity 66.7%; Pred. No. 2.8;
Matches 14; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 39 CTGAACCACTGCTTCTCTTTT 59
Db 1 CUGAACCACTGUCUCUCUUTT 21

RESULT 7
US-10-923-451-167
; Sequence 167, Application US/10923451
; Publication No. US20050256068A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Thompson, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearoyl-CoA Desaturase
; FILE REFERENCE: 400/210 (MBHB02-1030-C)
; CURRENT APPLICATION NUMBER: US/10/923,451
; CURRENT FILING DATE: 2004-08-20
; NUMBER OF SEQ ID NOS: 810
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 167
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic
US-10-923-451-167

Query Match 29.7%; Score 19; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 4.5;
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 3 GGCAGCTCCCTCTCTGCACA 21
Db 1 GGCAGCUCUCCUCUCGCACA 19

RESULT 8
```

US-10-923-451-168
; Sequence 168, Application US/10923451
; Publication No. US20050256068A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Thompson, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearoyl-CoA Desaturase
; FILE REFERENCE: 400/210 (MBHB02-1030-C)
; CURRENT APPLICATION NUMBER: US/10/923,451
; CURRENT FILING DATE: 2004-08-20
; NUMBER OF SEQ ID NOS: 810
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 168
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic
US-10-923-451-168

Query Match 29.7%; Score 19; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 4.5;
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 21 ACAGAAATGCTCAGGGTCTC 39
Db 1 ACAGAAATGCTCAGGGTCTC 19

RESULT 9
US-10-923-451-169
; Sequence 169, Application US/10923451
; Publication No. US20050256068A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Thompson, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearoyl-CoA Desaturase
; FILE REFERENCE: 400/210 (MBHB02-1030-C)
; CURRENT APPLICATION NUMBER: US/10/923,451
; CURRENT FILING DATE: 2004-08-20
; NUMBER OF SEQ ID NOS: 810
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 169
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic
US-10-923-451-169

Query Match 29.7%; Score 19; DB 1; Length 19;
Best Local Similarity 63.2%; Pred. No. 4.5;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 39 CTGAACCACTGCTCTCTT 57
Db 1 CUGAACCACTGCTCTCTT 19

RESULT 10
US-10-923-451-457/c
; Sequence 457, Application US/10923451
; Publication No. US20050256068A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Thompson, James

; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearoyl-CoA Desaturase
; FILE REFERENCE: 400/210 (MBHB02-1030-C)
; CURRENT APPLICATION NUMBER: US/10/923,451
; CURRENT FILING DATE: 2004-08-20
; NUMBER OF SEQ ID NOS: 810
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 457
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic
US-10-923-451-457

Query Match 29.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 4.5;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GGCAGCTCCCTCTGCACA 21
Db 19 GGCAGCTCCCTCTGCACA 1

RESULT 11
US-10-923-451-458/c
; Sequence 458, Application US/10923451
; Publication No. US20050256068A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Thompson, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearoyl-CoA Desaturase
; FILE REFERENCE: 400/210 (MBHB02-1030-C)
; CURRENT APPLICATION NUMBER: US/10/923,451
; CURRENT FILING DATE: 2004-08-20
; NUMBER OF SEQ ID NOS: 810
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 458
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic
US-10-923-451-458

Query Match 29.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 4.5;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 21 ACAGAAATGCTCAGGGTCTC 39
Db 19 ACAGAAATGCTCAGGGTCTC 1

RESULT 12
US-10-923-451-459/c
; Sequence 459, Application US/10923451
; Publication No. US20050256068A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Thompson, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearoyl-CoA Desaturase
; FILE REFERENCE: 400/210 (MBHB02-1030-C)
; CURRENT APPLICATION NUMBER: US/10/923,451
; CURRENT FILING DATE: 2004-08-20
; NUMBER OF SEQ ID NOS: 810

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; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 459
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic
US-10-923-451-459
```

```
Query Match          29.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 4.5;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      39 CTGAACCACTGCTTCTCTT 57
        |||||
Db       19 CTGAACCACTGCTTCTCTT 1
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Search completed: May 9, 2006, 12:39:59
Job time : 0.001 secs
```

GenCore version 5.1.1.8
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM nucleic - nucleic search, using sw model

Run on: May 9, 2006, 12:41:46 ; Search time 0.001 Seconds
(without alignments)
10.240 Million cell updates/sec

Title: US-09-918-187-3_2989-3052
Perfect score: 64
Sequence: 1 caggcagctcctcctgcac.....cactgctctcttttgaag 64

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 4 seqs, 80 residues

Total number of hits satisfying chosen parameters: 8

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 4 summaries

Database : pubmaindb.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result	No.	Score	Query Match	Length	DB ID	Description
C	1	20	31.2	20	1	US-09-918-187-30
C	2	20	31.2	20	1	US-10-484-442-30
C	3	20	31.2	20	1	US-10-619-253-30
C	4	20	31.2	20	1	US-10-619-253-124

ALIGNMENTS

RESULT 1
US-09-918-187-30/c
; Sequence 30, Application US/09918187
; Publication No. US20030083282A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF STEAROYL-COA DESATURASE EXPRESSION
; FILE REFERENCE: ISPH-0590
; CURRENT APPLICATION NUMBER: US/09/918,187
; CURRENT FILING DATE: 2001-07-30
; NUMBER OF SEQ ID NOS: 80
; SEQ ID NO 30
; TYPE: DNA
; LENGTH: 20
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-918-187-30

Query Match 31.2%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 23 AGAATGCTCAGGCTCACTGA 42
|||||
Db 20 AGAATGCTCAGGCTCACTGA 1

RESULT 2
US-10-484-442-30/c
; Sequence 30, Application US/10484442
; Publication No. US20040254359A1
; GENERAL INFORMATION:
; APPLICANT: Isis Pharmaceuticals, Inc.
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF STEAROYL-COA DESATURASE EXPRESSION
; FILE REFERENCE: ISPH20695
; CURRENT APPLICATION NUMBER: US/10/484,442
; CURRENT FILING DATE: 2004-01-29
; PRIOR APPLICATION NUMBER: 09/918,187
; PRIOR FILING DATE: 2001-07-30
; NUMBER OF SEQ ID NOS: 80
; SEQ ID NO 30
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-484-442-30

Query Match 31.2%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 23 AGAATGCTCAGGCTCACTGA 42
|||||
Db 20 AGAATGCTCAGGCTCACTGA 1

RESULT 3
US-10-619-253-30/c
; Sequence 30, Application US/10619253
; Publication No. US20050043256A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF STEAROYL-COA DESATURASE EXPRESSION
; FILE REFERENCE: ISPH-0590US.P1
; CURRENT APPLICATION NUMBER: US/10/619,253
; CURRENT FILING DATE: 2003-07-15
; PRIOR APPLICATION NUMBER: US 09/918,187
; PRIOR FILING DATE: 2001-07-30
; NUMBER OF SEQ ID NOS: 418
; SEQ ID NO 30
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-619-253-30

Query Match 31.2%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 23 AGAATGCTCAGGCTCACTGA 42
|||||
Db 20 AGAATGCTCAGGCTCACTGA 1

RESULT 4
US-10-619-253-124/c
; Sequence 124, Application US/10619253
; Publication No. US20050043256A1
; GENERAL INFORMATION:

; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF STEAROYL-COA DESATURASE EXPRESSION
; FILE REFERENCE: ISPH-0590US.PI
; CURRENT APPLICATION NUMBER: US/10/619,253
; CURRENT FILING DATE: 2003-07-15
; PRIOR APPLICATION NUMBER: US 09/918,187
; PRIOR FILING DATE: 2001-07-30
; NUMBER OF SEQ ID NOS: 418
; SEQ ID NO 124
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-619-253-124

Query Match 31.2%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 32 AGGTCCTACTGAACCACTGCT 51
| | | | | | | | | | | | | | | |
Db 20 AGGTCCTACTGAACCACTGCT 1

Search completed: May 9, 2006, 12:41:46
Job time : 0.001 secs

XX short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
KW stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
KW atherosclerosis; cancer; viral infection; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.

```

XX PN WO2003070885-A2.
XX PD
XX PF
XX PP
XX PR 13-FEB-2003; 2003WO-US004317.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 20-SEP-2002; 2002US-0412304P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J, Beigelman L, Thompson J;
XX PP WPI; 2003-721687/68.
XX PT New short interfering nucleic acid, useful e.g. for treatment and
XX PT diagnosis of obesity or diabetes, downregulates expression of the
XX PT stearyl-CoA desaturase gene.
XX PS Disclosure; SEQ ID NO 622; 139pp; English.
XX CC The present invention describes a short interfering nucleic acid (siNA)
XX CC that downregulates expression of the SCD (stearyl-CoA desaturase) gene
XX CC by RNA interference. Also described: (1) modulating expression of SCD
XX CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
XX CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
XX CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
XX CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
XX CC virucide activities. The siNAs can be used to modulate expression of SCD
XX CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
XX CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
XX CC They can also be used for drug screening; diagnosis; target
XX CC identification and validation; genetic engineering; pharmacogenomics;
XX CC studying gene function and gene mapping (e.g. of single-nucleotide
XX CC polymorphisms). The present sequence represents an SCD siNA, which is
XX CC used in the exemplification of the present invention.
XX SQ Sequence 21 BP; 3 A; 7 C; 2 G; 2 T; 7 U; 0 Other;

Query Match 32.8%; Score 21; DB 1; Length 21;
Best Local Similarity 66.7%; Pred. No. 2.6;
Matches 14; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 39 CTGAACCACTGCTCTCTTTT 59
Db |:|||||:|:|:|:|:|:|

RESULT 3
ID ADE27669
XX ADE27669 standard; RNA; 21 BP.
XX AC ADE27669;
XX DT 29-JAN-2004 (first entry)
XX DE Stearyl-CoA desaturase siNA oligonucleotide SEQ ID NO:624.
XX KW short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
XX KW stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
XX KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
XX KW atherosclerosis; cancer; viral infection; drug screening;
XX KW genetic engineering; pharmacogenomic; gene mapping; ss.
XX OS Synthetic.
XX OS

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PN WO2003070885-A2.
XX PD
XX PF
XX PP
XX PR 13-FEB-2003; 2003WO-US004317.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 20-SEP-2002; 2002US-0412304P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J, Beigelman L, Thompson J;
XX PP WPI; 2003-721687/68.
XX PT New short interfering nucleic acid, useful e.g. for treatment and
XX PT diagnosis of obesity or diabetes, downregulates expression of the
XX PT stearyl-CoA desaturase gene.
XX PS Disclosure; SEQ ID NO 624; 139pp; English.
XX CC The present invention describes a short interfering nucleic acid (siNA)
XX CC that downregulates expression of the SCD (stearyl-CoA desaturase) gene
XX CC by RNA interference. Also described: (1) modulating expression of SCD
XX CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
XX CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
XX CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
XX CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
XX CC virucide activities. The siNAs can be used to modulate expression of SCD
XX CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
XX CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
XX CC They can also be used for drug screening; diagnosis; target
XX CC identification and validation; genetic engineering; pharmacogenomics;
XX CC studying gene function and gene mapping (e.g. of single-nucleotide
XX CC polymorphisms). The present sequence represents an SCD siNA, which is
XX CC used in the exemplification of the present invention.
XX SQ Sequence 21 BP; 3 A; 7 C; 2 G; 2 T; 7 U; 0 Other;

Query Match 32.8%; Score 21; DB 1; Length 21;
Best Local Similarity 66.7%; Pred. No. 2.6;
Matches 14; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 39 CTGAACCACTGCTCTCTTTT 59
Db |:|||||:|:|:|:|:|:|

RESULT 4
ID ABZ77075/C
XX ABZ77075 standard; DNA; 20 BP.
XX AC ABZ77075;
XX DT 07-MAY-2003 (first entry)
XX DE Human stearyl-CoA desaturase phosphorothioate oligonucleotide SEQ:30.
XX KW Human; stearyl-CoA desaturase; phosphorothioate; 2'-O-methoxyethyl;
XX KW 2'-MOB; cardiovascular; antiarteriosclerotic; antilipemic; cytostatic;
XX KW antiinflammatory; antisense therapy; antisense oligonucleotide; tumour;
XX KW abnormal lipid metabolism; abnormal cholesterol metabolism; infection;
XX KW atherosclerosis; cardiovascular disease; inflammation; inhibition; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX OS

```

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FH Key Location/Qualifiers
FT modified_base 1..20
FT FT /tag= a
FT FT /mod_base= OTHER
FT modified_base 1..5
FT FT /note= "phosphorothioate linkages"
FT FT /tag= b
FT FT /mod_base= OTHER
FT modified_base 16..20
FT FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
FT FT /tag= c
FT FT /mod_base= OTHER
FT FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
PN WO2003012031-A2.
XX 13-FEB-2003.
XX 16-JUL-2002; 2002WO-US022676.
XX 30-JUL-2001; 2001US-00918187.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2003-248160/24.
XX
XX New antisense oligonucleotides targeted to nucleic acids encoding human
XX stearyl-CoA desaturase, useful for treating diseases associated with the
XX desaturase, e.g. atherosclerosis, and in diagnostic and research
XX applications.
XX
XX Claim 3; Page 94; 117pp; English.
XX
XX The present invention describes a compound (I) that is 8-50 nucleobases
XX in length targeted to a nucleic acid molecule encoding human stearyl-CoA
XX desaturase, and which specifically hybridises with and inhibits the
XX expression of human stearyl-CoA desaturase, or which specifically
XX hybridises with at least an 8-nucleobase portion of an active site on a
XX nucleic acid molecule encoding human stearyl-CoA desaturase. Human
XX stearyl-CoA desaturase is mapped to chromosome 10. (I) has antilipemic,
XX cardiovascular, antiarteriosclerotic, cytostatic and antiinflammatory
XX activities, and can be used in antisense therapy. The antisense compounds
XX (I) can be used for modulating the expression of human stearyl-CoA
XX desaturase and for treating diseases or conditions associated with
XX expression of human stearyl-CoA desaturase, e.g. abnormal lipid or
XX cholesterol metabolism, atherosclerosis, or cardiovascular diseases. The
XX antisense compounds (I) can also be used for diagnostics, therapeutics
XX and prophylaxis, e.g. to prevent or delay infection, inflammation or
XX tumour formation, as research reagents and kits, and in distinguishing
XX between functions of various members of a biological pathway. The present
XX sequence represents a human stearyl-CoA desaturase inhibiting chimeric
XX phosphorothioate antisense oligonucleotide, which is given in an example
XX from the present invention
XX
XX Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 31.2%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 3.3;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 23 AGAATGCTCAGGGTCACTGA 42
XX Db 20 AGAATGCTCAGGGTCACTGA 1
XX
XX RESULT 5
XX ADX18220/c
XX ID ADX18220 standard; DNA; 20 BP.
XX AC ADX18220;
XX
XX Homo sapiens.
```

```
DT 05-MAY-2005 (first entry)
XX Human Stearyl-CoA desaturase antisense oligonucleotide ISIS 300911.
XX
XX Antisense; gene therapy; Stearyl-CoA desaturase; hypertension;
XX hypotensive; non-insulin dependent diabetes; antidiabetic;
XX endocrine disease; gastrointestinal disease; metabolic disorder; cancer;
XX cytostatic; neoplasm; obesity; anorectic; nutritional disorder;
XX Cardiovascular disease; Dermatological disease; Immune disorder;
XX Neurological disease; ss.
XX Homo sapiens.
XX Synthetic.
XX WO2005014607-A2.
XX 17-FEB-2005.
XX
XX 15-JUL-2004; 2004WO-US018932.
XX 15-JUL-2003; 2003US-00619253.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2005-163213/17.
XX
XX New compound comprising 8-50 nucleobases targeted to a nucleic acid
XX molecule encoding stearyl-CoA desaturase, useful in preparing a
XX composition for treating a condition associated with stearyl-CoA
XX desaturase, e.g., obesity.
XX Claim 1; SEQ ID NO 124; 256pp; English.
XX
XX The invention relates to a new compound, which is targeted to a nucleic
XX acid molecule encoding stearyl-CoA desaturase and inhibits its
XX expression. The compound is useful in preparing a composition for
XX treating an animal having a disease or condition associated with stearyl
XX -CoA desaturase, e.g. cardiovascular disorder, obesity, non-insulin-
XX dependent diabetes mellitus, a skin disease, hypertension, a neurological
XX disease, an immune disorder or cancer. The present sequence represents a
XX human stearyl-CoA desaturase antisense oligonucleotide.
XX
XX Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 31.2%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 3.3;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 32 AGGGTCACTGAACCACTGCT 51
XX Db 20 AGGGTCACTGAACCACTGCT 1
XX
XX RESULT 6
XX ADX18126/c
XX ID ADX18126 standard; DNA; 20 BP.
XX AC ADX18126;
XX
XX 05-MAY-2005 (first entry)
XX
XX Human Stearyl-CoA desaturase antisense oligonucleotide ISIS 147919.
XX
XX Antisense; gene therapy; Stearyl-CoA desaturase; hypertension;
XX hypotensive; non-insulin dependent diabetes; antidiabetic;
XX endocrine disease; gastrointestinal disease; metabolic disorder; cancer;
XX cytostatic; neoplasm; obesity; anorectic; nutritional disorder;
XX Cardiovascular disease; Dermatological disease; Immune disorder;
XX Neurological disease; ss.
XX Homo sapiens.
XX OS
```

OS Synthetic.
 XX WO2005014607-A2.
 XX
 XX 17-FEB-2005.
 XX
 XX 15-JUL-2004; 2004WO-US018932.
 PF
 XX 15-JUL-2003; 2003US-00619253.
 XX
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Crooke RM, Graham MJ;
 PI
 XX WPI; 2005-163213/17.
 DR
 XX
 XX New compound comprising 8-50 nucleobases targeted to a nucleic acid
 PT molecule encoding stearyl-CoA desaturase, useful in preparing a
 PT composition for treating a condition associated with stearyl-CoA
 PT desaturase, e.g., obesity.
 XX
 XX Example 15; SEQ ID NO 30; 256pp; English.
 PS
 XX The invention relates to a new compound, which is targeted to a nucleic
 CC acid molecule encoding stearyl-CoA desaturase and inhibits its
 CC expression. The compound is useful in preparing a composition for
 CC treating an animal having a disease or condition associated with stearyl
 CC -CoA desaturase, e.g. cardiovascular disorder, obesity, non-insulin-
 CC dependent diabetes mellitus, a skin disease, hypertension, a neurological
 CC disease, an immune disorder or cancer. The present sequence represents a
 CC human stearyl-CoA desaturase antisense oligonucleotide.
 XX
 XX Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
 SQ

Query Match 31.2%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 3.3;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 23 AGAATGCTCAGGGTCACTGA 42
 |||||
 DB 20 AGAATGCTCAGGGTCACTGA 1

RESULT 7
 ADE27514/c
 ID ADE27514 standard; RNA; 19 BP.
 XX
 AC ADE27514;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Stearyl-CoA desaturase siNA oligonucleotide SEQ ID NO:458.
 XX
 KW short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
 KW stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
 KW antiarteriosclerotic; cytosstatic; virucide; obesity; diabetes;
 KW atherosclerosis; cancer; viral infection; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 XX
 OS Synthetic.
 XX
 XX WO2003070885-A2.
 XX
 XX 28-AUG-2003.
 XX
 XX 13-FEB-2003; 2003WO-US004317.
 XX
 XX 20-FEB-2002; 2002US-0358580P.
 PR
 XX 11-MAR-2002; 2002US-0363124P.
 PR
 XX 06-JUN-2002; 2002US-0386782P.
 PR
 XX 29-AUG-2002; 2002US-0406784P.
 PR
 XX 05-SEP-2002; 2002US-0408378P.
 PR
 XX 09-SEP-2002; 2002US-0409293P.
 PR

PR 20-SEP-2002; 2002US-0412304P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Mcswiggen J, Beigelman L, Thompson J;
 XX
 XX WPI; 2003-721687/68.
 DR
 XX
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of obesity or diabetes, downregulates expression of the
 PT stearyl-CoA desaturase gene.
 XX
 XX Example 3; SEQ ID NO 458; 139pp; English.
 PS
 XX The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of the SCD (stearyl-CoA desaturase) gene
 CC by RNA interference. Also described: (1) modulating expression of SCD
 CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
 CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
 CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
 CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
 CC virucide activities. The siNAs can be used to modulate expression of SCD
 CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
 CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
 CC They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents an SCD siNA, which is
 CC used in the exemplification of the present invention.
 XX
 XX Sequence 19 BP; 3 A; 5 C; 5 G; 0 T; 6 U; 0 Other;
 SQ

Query Match 29.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 4.2;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 21 ACAGAATGCTCAGGGTCAC 39
 |||||
 DB 19 ACAGAATGCTCAGGGTCAC 1

RESULT 8
 ADE27225
 ID ADE27225 standard; RNA; 19 BP.
 XX
 AC ADE27225;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Stearyl-CoA desaturase siNA oligonucleotide SEQ ID NO:169.
 XX
 KW short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
 KW stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
 KW antiarteriosclerotic; cytosstatic; virucide; obesity; diabetes;
 KW atherosclerosis; cancer; viral infection; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 XX
 OS Synthetic.
 XX
 XX WO2003070885-A2.
 XX
 XX 28-AUG-2003.
 XX
 XX 13-FEB-2003; 2003WO-US004317.
 XX
 XX 20-FEB-2002; 2002US-0358580P.
 PR
 XX 11-MAR-2002; 2002US-0363124P.
 PR
 XX 06-JUN-2002; 2002US-0386782P.
 PR
 XX 29-AUG-2002; 2002US-0406784P.
 PR
 XX 05-SEP-2002; 2002US-0408378P.
 PR
 XX 09-SEP-2002; 2002US-0409293P.
 PR
 XX 20-SEP-2002; 2002US-0412304P.
 PR

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PR 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
PA Mcswiggen J, Beigelman L, Thompson J;
PI WPI; 2003-721687/68.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of obesity or diabetes, downregulates expression of the
XX stearyl-CoA desaturase gene.
XX
XX Example 3; SEQ ID NO 169; 139pp; English.
XX
XX The present invention describes a short interfering nucleic acid (siNA)
XX that downregulates expression of the SCD (stearyl-CoA desaturase) gene
XX by RNA interference. Also described: (1) modulating expression of SCD
XX genes in cells, tissue explants or organisms by introduction of siNA; (2)
XX kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
XX complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
XX siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
XX virucide activities. The siNAs can be used to modulate expression of SCD
XX genes, in cells, tissue explants or organisms, e.g. for treating obesity;
XX diabetes (types I and II); atherosclerosis; cancer and viral infections.
XX They can also be used for drug screening; diagnosis; target
XX identification and validation; genetic engineering; pharmacogenomics;
XX studying gene function and gene mapping (e.g. of single-nucleotide
XX polymorphisms). The present sequence represents an SCD siNA, which is
XX used in the exemplification of the present invention.
XX
XX Sequence 19 BP; 3 A; 7 C; 2 G; 0 T; 7 U; 0 Other;
SQ
Query Match 29.7%; Score 19; DB 1; Length 19;
Best Local Similarity 63.2%; Pred. No. 4.2;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 39 CTGAACCACTGCTTCTCT 57
Db 1 CUGAACCACTGCTTCTCT 19

RESULT 9
ADE27223
ID ADE27223 standard; RNA; 19 BP.
XX
XX ADE27223;
AC
XX
XX 29-JAN-2004 (first entry)
DT
XX
XX Stearyl-CoA desaturase siNA oligonucleotide SEQ ID NO:167.
DE
XX
XX short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
KW stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
KW atherosclerosis; cancer; viral infection; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.
XX
XX Synthetic.
OS
XX
XX WO2003070885-A2.
XX
XX 28-AUG-2003.
XX
XX 13-FEB-2003; 2003WO-US004317.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX
XX 11-MAR-2002; 2002US-0363124P.
XX
XX 06-JUN-2002; 2002US-0386782P.
XX
XX 29-AUG-2002; 2002US-0406784P.
XX
XX 05-SEP-2002; 2002US-0408378P.
XX
XX 09-SEP-2002; 2002US-0409293P.
XX
XX 20-SEP-2002; 2002US-0412304P.
XX
XX 15-JAN-2003; 2003US-0440129P.

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XX (RIBO-) RIBOZYME PHARM INC.
XX Mcswiggen J, Beigelman L, Thompson J;
XX WPI; 2003-721687/68.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of obesity or diabetes, downregulates expression of the
XX stearyl-CoA desaturase gene.
XX
XX Example 3; SEQ ID NO 167; 139pp; English.
XX
XX The present invention describes a short interfering nucleic acid (siNA)
XX that downregulates expression of the SCD (stearyl-CoA desaturase) gene
XX by RNA interference. Also described: (1) modulating expression of SCD
XX genes in cells, tissue explants or organisms by introduction of siNA; (2)
XX kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
XX complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
XX siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
XX virucide activities. The siNAs can be used to modulate expression of SCD
XX genes, in cells, tissue explants or organisms, e.g. for treating obesity;
XX diabetes (types I and II); atherosclerosis; cancer and viral infections.
XX They can also be used for drug screening; diagnosis; target
XX identification and validation; genetic engineering; pharmacogenomics;
XX studying gene function and gene mapping (e.g. of single-nucleotide
XX polymorphisms). The present sequence represents an SCD siNA, which is
XX used in the exemplification of the present invention.
XX
XX Sequence 19 BP; 3 A; 9 C; 4 G; 0 T; 3 U; 0 Other;
SQ
Query Match 29.7%; Score 19; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 4.2;
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 3 GGCAGCTCCCTCCTGCACA 21
Db 1 GGCAGCTCCCTCCTGCACA 19

RESULT 10
ADE27513/c
ID ADE27513 standard; RNA; 19 BP.
XX
XX ADE27513;
AC
XX
XX 29-JAN-2004 (first entry)
DT
XX
XX Stearyl-CoA desaturase siNA oligonucleotide SEQ ID NO:457.
DE
XX
XX short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
KW stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
KW atherosclerosis; cancer; viral infection; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.
XX
XX Synthetic.
OS
XX
XX WO2003070885-A2.
XX
XX 28-AUG-2003.
XX
XX 13-FEB-2003; 2003WO-US004317.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX
XX 11-MAR-2002; 2002US-0363124P.
XX
XX 06-JUN-2002; 2002US-0386782P.
XX
XX 29-AUG-2002; 2002US-0406784P.
XX
XX 05-SEP-2002; 2002US-0408378P.
XX
XX 09-SEP-2002; 2002US-0409293P.
XX
XX 20-SEP-2002; 2002US-0412304P.
XX
XX 15-JAN-2003; 2003US-0440129P.

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PA (RIBO-) RIBOZYME PHARM INC.
 XX Mcswiggen J, Beigelman L, Thompson J;
 XX WPI; 2003-721687/68.
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of obesity or diabetes, downregulates expression of the
 PT stearyl-CoA desaturase gene.
 XX Example 3; SEQ ID NO 457; 139pp; English.
 XX The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of the SCD (stearyl-CoA desaturase) gene
 CC by RNA interference. Also described: (1) modulating expression of SCD
 CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
 CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
 CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
 CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
 CC virucide activities. The siNAs can be used to modulate expression of SCD
 CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
 CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
 CC They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents an SCD siNA, which is
 CC used in the exemplification of the present invention.
 XX Sequence 19 BP; 3 A; 4 C; 9 G; 0 T; 3 U; 0 Other;
 SQ Query Match 29.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 4.2;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GGCAGCTCCCTCTGCACA 21
 |||||
 DB 19 GGCAGCTCCCTCTGCACA 1

RESULT 11
 ADE27224
 ID ADE27224 standard; RNA; 19 BP.
 AC ADE27224;
 XX 29-JAN-2004 (first entry)
 DE Stearyl-CoA desaturase siNA oligonucleotide SEQ ID NO:168.
 KW short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
 KW stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
 KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
 KW atherosclerosis; cancer; viral infection; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 XX Synthetic.
 OS
 XX WO2003070885-A2.
 PN 28-AUG-2003.
 XX 13-FEB-2003; 2003WO-US004317.
 XX 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 20-SEP-2002; 2002US-0412304P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA

XX Mcswiggen J, Beigelman L, Thompson J;
 XX WPI; 2003-721687/68.
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of obesity or diabetes, downregulates expression of the
 PT stearyl-CoA desaturase gene.
 XX Example 3; SEQ ID NO 168; 139pp; English.
 XX The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of the SCD (stearyl-CoA desaturase) gene
 CC by RNA interference. Also described: (1) modulating expression of SCD
 CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
 CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
 CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
 CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
 CC virucide activities. The siNAs can be used to modulate expression of SCD
 CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
 CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
 CC They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents an SCD siNA, which is
 CC used in the exemplification of the present invention.
 XX Sequence 19 BP; 6 A; 5 C; 5 G; 0 T; 3 U; 0 Other;
 SQ Query Match 29.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 4.2;
 Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 21 ACAGATGCTCAGGGTCAC 39
 |||||
 DB 1 ACAGAAUGCUCAGGGUCAC 19

RESULT 12
 ADE27515/c
 ID ADE27515 standard; RNA; 19 BP.
 AC ADE27515;
 XX 29-JAN-2004 (first entry)
 DE Stearyl-CoA desaturase siNA oligonucleotide SEQ ID NO:459.
 KW short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
 KW stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
 KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
 KW atherosclerosis; cancer; viral infection; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 XX Synthetic.
 OS
 XX WO2003070885-A2.
 PN 28-AUG-2003.
 XX 13-FEB-2003; 2003WO-US004317.
 XX 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 20-SEP-2002; 2002US-0412304P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA

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PI Mcswiggen J, Beigelman L, Thompson J;
XX
XX WPI; 2003-721687/68.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of obesity or diabetes, downregulates expression of the
PT stearyl-CoA desaturase gene.
XX
XX Example 3; SEQ ID NO 459; 139pp; English.
XX
XX The present invention describes a short interfering nucleic acid (siNA)
CC that downregulates expression of the SCD (stearyl-CoA desaturase) gene
CC by RNA interference. Also described: (1) modulating expression of SCD
CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
CC siNAs have anorectic, anti-diabetic, antiarteriosclerotic, cyrostatic and
CC virucide activities. The siNAs can be used to modulate expression of SCD
CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
CC They can also be used for drug screening; diagnosis; target
CC identification and validation; genetic engineering; pharmacogenomics;
CC studying gene function and gene mapping (e.g. of single-nucleotide
CC polymorphisms). The present sequence represents an SCD siNA, which is
CC used in the exemplification of the present invention.
XX
XX Sequence 19 BP; 7 A; 2 C; 7 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 29.7%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 4.2;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0
XX
XX 39 CTGAACCACTGCTCTCTT 57
XX |||||
XX 19 CTGAACCACTGCTCTCTT 1
XX
XX Search completed: May 9, 2006, 12:41:12
XX Job time : 0.001 secs

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